

L 27235-65

ACCESSION NR: AT5003906

solution of linear programming problem with a model, using forced variations of the target function. The mathematical formulation of the linear programming problem is expressed in the form of finding the minimum or maximum of a target function

$$\mu = c_1 x_1 + \dots + c_n x_n \quad (1)$$

under conditions

$$\begin{aligned} a_{11}x_1 + \dots + a_{1n}x_n &= b_1 \\ \dots &\dots \\ a_{m1}x_1 + \dots + a_{mn}x_n &= b_m \end{aligned} \quad (2)$$

$$x_i \geq 0 \quad (i = 1, \dots, n) \quad (3)$$

Card 2/3

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206420006-1"

L 27235-65

ACCESSION NR: AT5003906

with $m < n$. The operating sequences are described for all three models, and several examples are presented. Orig. art. has: 6 figures, 3 formulas, and 4 tables.

ASSOCIATION: None

SUBMITTED: 17Aug64

ENCL: 00

SUB CODE: DP, MA

NR REF SOV: 007

OTHER: 004

Card 3/3

BORKOVSKIY, V. I.
USSR/ Miscellaneous - Philology

Card 1/1 Pub. 124 - 6/25

Authors : Borkovskiy, V. I., Dr. of Philolog. Sc.

Title : Status and problems of studying the Russian language

Periodical : Vest. AN SSSR 25/12, 36-42, Dec 1955

Abstract : The present day status and the problems involved in studying the modern Russian language are discussed.

Institution :

Submitted :

STARODUBOV, K.F.; BORKOVSKIY, Yu.A.; GUL', Yu.P.

Hardening of low-carbon steel from the rolling temperature. Izv.
vys. ucheb. zav.; chern. met. no.2:109-113 '61. (MIRA 14:11)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Steel--Hardening)

BORKOVSKIY, Yu. Z.

18(9) PLATE I BOOK EXPLOPATIVE 807/1728

Akademika Nauk SSSR. Institut metallurgii
Sovetskoye problemy metallurgii (Modern Problems in Metallurgy)Repub. Mat. A.M. Samarin, Corresponding Member, USSR Academy of
Sciences, Ed., or Publishing House: V.J. Kharakov, and
A.M. Dorovskiy, Tech. Ed.: F.T. Polyakova.

PURPOSE: This book is intended for scientific and technical personnel in the field of metallurgy.

CONTENTS: This is a collection of articles on certain aspects of Soviet metallurgy. The book is dedicated to the 10th anniversary of Ivan Pavlovich Martin on the occasion of his 75th birthday. The book is divided into seven parts. The first part consists of three articles presenting a brief account of the general scientific and practical activity of the Soviet metallurgy and industry by John Chapman, Michael Gove, and John Elliott (U.K.). It also includes an article describing their meeting with Martin in Moscow and also him visit to the United States. The second part consists of three articles and deals with new materials and alloys for the Soviet metallurgical industry. The third part represents the major portion of the book. It consists of 25 articles dealing with the various aspects of the metallurgy of pig iron and steel. The fourth part consists of two articles treating the metal properties of different steels. The fifth part consists of three eight articles on the forming of metals. The sixth part consists of three articles discussing certain aspects of physical metalurgy. The last part deals with general problems in the field of metallurgy. References are given after each article.

TABLE OF CONTENTS

807/1728

Korobkov, I.I. [Doctor of Chemical Sciences, Metallurgical Institute] Izmeni A.A. Baykov, as USSR. Chemotekhnicheskii

Strelkov, K.P. [Academician], and Yu.Z. Borkovskiy [Candidate of Technical Sciences] or Ferrous Metallurgy As USSR. Chemotekhnicheskii. In creating the Strength and Toughness of Low-Carbon Steel by Heat Treatment

Pashinovskiy, L.I. and Z.O. Prudman. Investigating Fatigue Strength of Rails Containing Arsenic

Pochodko, P.J., L.N. Kravchenko, and V.A. Koskin [Metallurgical PERGAMON] Increasing the Strength and Wear Resistance of Railroad Rails by Oil Quenching

GENERAL PROBLEMS IN METALLURGY
Shestopalov, K.P. [Candidate of Technical Sciences, Diprores (State) Institute for the Design and Planning of Metallurgical Plants]. General Plans of Metallurgical Plants 615
AVAILABILITY: Library of Congress
DATE: 12/12
REF ID: 807/1728
C-19-29

1.1710

24213
S/148761/000/001/012/015
A161/A133

AUTHORS: Starodubov, K. F., and Borkovskiy, Yu. Z.

TITLE: The effect of heat treatment on the cold brittleness of low-carbon steel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 1, 1961, 166 - 169

TEXT: The article presents the results of an experimental investigation proving that it is possible to preserve the toughness in low-carbon steel without tempering. The experiment material was grade "20" steel (0.19% C, 0.54% Mn, 0.27% Si; 0.018% P, 0.020% S, 0.11% Cr, 0.06% Ni). Blanks 230 mm long and 20, 36 and 55 mm in diameter were hardened at 900°C in salted cold water and tempered at different temperatures for 1 hour. Standard notch specimens were tested on a "MK-30" impact test machine at temperatures from -196 to +100°C. The upper critical brittleness points were determined by plotting curves and by the appearance of fracture. The test temperature corresponding to the bend on the cold-brittleness curve was always accompanied by an appearance of a coarse-grain component in frac.


Card 1/3

24213

S/148/61/000/001/012/015
A161/A133

The effect of heat treatment on the...

ture. This temperature was taken as the upper critical brittleness point (T_{cr}). Quenching in water raised the impact resistance considerably throughout the entire test temperature range, and the T_{cr} point moved 20 - 60° lower, depending on the blank diameter. Tempering after quenching brought T_{cr} farther down by some 100°C. Lowering of the T_{cr} point was stated at an increase in the tempering temperature raised to 400 - 450°C. Tempering at above 450°C raised the impact resistance but did not lower T_{cr} point. It was obvious that the T_{cr} -lowering effect of quenching increased with an increasing diameter of the quenched blanks. The T_{cr} shift was considerable (100°) even in 55 mm diameter blanks, where quenching produced only a slight improvement of mechanical properties, and such a shift doubtless increases the structural strength considerably. It may be concluded that the highest toughness reserve was in structures consisting of austenite decomposition products that formed in the range of 400 - 450°C and higher, and in structures that formed as a result of tempering at these temperatures in the case of the cooling rate in quenching being so high that austenite decomposed at lower temperatures. Thus, if low-carbon steel is quenched in a medium that causes austenite decomposition in the above indicated temperature

Card 2/3

24213
S/148/61/000/001/012/015
A161/A133

The effect of heat treatment on the...

range, the metal will have a maximum toughness reserve even without subsequent tempering. The quenching of blanks 30 mm in cross section and larger in water results in a maximum shift of the T_{cr} point towards low temperatures, which means that quenching must not necessarily be followed by tempering. Parts of smaller cross section need either quenching in milder media, or quenching with subsequent tempering at 400 - 450°. There are 3 figures and 1 Soviet-bloc reference. (Abstracter's note: Essentially full translation).

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk Metallurgical Institute)

SUBMITTED: May 26, 1960

A

Card 3/3

STARODUBOV, K.F., akademik; BORKOVSKIY, Yu.Z., inzh.

Properties of low-carbon steel following hardening and tempering.
Metalloved. i term. obr. met. no.5:15-18 My '61. (MIRA 14:5)

1. Institut chernoy metallurgii AN USSR. 2. Akademiya nauk USSR
(for Starodubov).
(Steel alloys—Testing) (Metals, Effect of temperature on)

STARODUBOV, K.F., akademik; BORKOVSKIY, Yu.Z., inzh.

Changes in the physical properties of low-carbon steel depending
on the rate of quench hardening and the temperature of sub-
sequent tempering. Trudy Inst. chern. met. AN URSR no.14:50-59
'61. (MIRA 14:10)

1. Akademiya nauk USSR (for Starodubov).
(Steel--Hardening) (Dilatometry)

STARODUBOV, K.F., akademik; BORKOVSKIY, Yu.Z., inzh.; LASHKOV, A.D., inzh.;
TSAL'MAN, L.B., inzh.

Ways of reducing steel consumption in the manufacture of large-diameter pipes for main pipelines. Trudy Inst.chern.met.AN URSR no.14:60-65 '61. (MIRA' 14:10)

1. Akademiya nauk USSR (for Starodubov).
(Sheet steel) (Pipe mills)

STARODUBOV, K.F., akademik; BORKOVSKIY, Yu.Z., inzh.

Effect of the method of steel smelting, welding, and other factors on the effectiveness of heat treatment of low carbon steel. Trudy Inst. chern. met. AN URSR 18:11-21 '62.

(MIRA 15:9)

1. Akademiya nauk UkrSSR (for Starodubov).

(Steel--Heat treatment)

(Metals, Effect of temperature on)

BORKOVSKIY, Yu.Z., inzh.

Time transducer for low-speed plotting by MPO-2 oscilloscope.
Trudy Inst. chern. met. AN URSR 18:95-96 '62. (MIRA 15:9)
(Oscillography) (Transducers)

BORKOVSKIY, Yu.Z., inzh.; NEKRASOVA, S.Z., inzh.

Improved method of registering time and temperature in a differential dilatometer with optical recording. Trudy Inst. chern. met. AN URSR 18:92-94 '62. (MIRA 15:9)
(Dilatometer)

S/129/63/000/004/011/014
A004/A127

AUTHORS: Starodubov, K.F., Borkovskiy, Yu.Z., Gul', Yu.P.

TITLE: The effect of the interval between the end of deformation and hardening on the structure and properties of steel

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, no. 4,
1963, 48 - 50

TEXT: The authors investigated the changes of properties and fine structure of grade 20 steel - 0.19% C, 0.57% Mn, 0.27% Si, 0.016% P and 0.018% S - depending on the time which passed between the termination of hot deformation and hardening of the specimens. In conformity with up-to-date conceptions of recrystallization processes after hot deformation, it was found that the periods corresponding to the processes of rest, origination of new grains and collective recrystallization can be sufficiently clearly fixed. To obtain stable results in hardening low-carbon steels by rolling heating, the time interval between termination of hot deformation and hardening should ensure sufficient rest and recrystallization, not leading to an

Card 1/2

The effect of the interval between ...

S/129/63/000/004/011/014
A004/A127

extreme growth of grains. This time interval for the grade 20 steel should amount to 10 - 20 sec. There is 1 figure.

ASSOCIATION: Institut chernoy metallurgii AN USSR (Institute of Ferrous Metallurgy AS UkrSSR)

Card 2/2

BORKOVSKIY, Yu.Z.; PARUSOV, V.V.; KALMYKOV, V.V.

Device for impact tensile tests. Zav. lab. 30 no.10:1268 '64.
(MIRA 18:4)

1. Dnepropetrovskiy institut chernoy metallurgii.

BORKOVSZKY, T.

Let us get acquainted with ship modelling!

p. 23 (Repules, No. 8, Nov. 1957, Budapest, Hungary)

Monthly Index of East European Acces:ions (MEAJ) LC. Vol. 7, no. 2,
February 1958

ACCESSION NR: AP4015235

P/0014/64/043/001/0016/0019

AUTHOR: Borkowski, Boguslaw; Borkowska, Aleksandra; Banzykowna, Krystyna

TITLE: Rapid method of preparing cerium of very high purity

SOURCE: Przemysl chemiczny, v. 43, no. 1, 1964, 16-19

TOPIC TAGS: cerium oxide, ammonium hexanitrocerate, cerium complex compound

ABSTRACT: The starting material used in developing the method was $(\text{NH}_4)_2\text{Ce}(\text{NO}_3)_6$, obtained from technical-grade cerium hydroxide. The salt was dissolved in water, and after a certain time had elapsed, the solution was passed through a column containing a cation exchanger. It was noted that a substantial part of the cerium had gone through the column without being retained, while the cations constituting the impurities of the ammonium hexanitrocerate used had been completely removed from the solution. It was also observed that in order to obtain a high yield of pure cerium dioxide, a 12-15 hr interval was necessary between the dissolution of the salt and its passage through the column. The effect of the period of "aging" of the solution, its concentration, and the presence of other impurities (such as NH_4NO_3 or HNO_3) on the efficiency of the method was studied. Under optimum conditions, this yield may reach 90% of theoretical. The presence of foreign ions could not be

Card 1/2

ACCESSION NR: AP4015235

detected by common methods of spectroscopic analysis. The mechanism of the process may be interpreted by attributing the phenomena observed to the formation of noncationic hydroxynitrate complexes of cerium.

ASSOCIATION: Zaklad Ziem Rzadkich UAM, Poznan (Rare Earths Laboratory UAM)

SUBMITTED: 01Jun63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH

NO REF SOV: 000

OTHER: 014

Card 2/2

MALISZEWSKA, Elzbieta; BORKOWSKA, Anna

From the history of the Library of the Institute of General
Chemistry. Przem chem 42 no.12:725-728 D'63.

BORKOWSKA, MARIA

3

POL.

Peculiar oölitic rock from Lukow in Pidlasie. Maria
Borkowska (Ugiv. Puławy, Poland). Polaka Akad. Nauk,
Kom. Geol., Arch. Mineral. 18, 105-70(1954)(in English
174-8).—The oölites consist of Fe oxide hydrates deposited
on detrital quartz grains. Chem. analyses are given.

Michael Fleischer / DC LK

Borkowska, Maria

✓ Granite from Strzelin, Lower Silesia, Poland, and associated crystalline rocks. Maria Borkowska (Univ. Warsaw). *Pol. Akad. Nauk, Kom. Geol., Arch. Mineralog.* 19, 17-36(1955)(Pub. 1950)(English summary).—Petrographic study with chem. analyses of 2 rocks. An older granitic granite which is cut by normal granite, was probably formed by granitization of sediments, the material added probably coming from the same plutonic source that later produced the normal granite. Michael Fleischer

12
3
1. Genesis of granites from Kudowa. M. Burcharski (Polish Acad. Sci., Warsaw). Bull. Acad. Polon. Sci., Classe II, 13, 501-510 (1957) (in English).—Microscopic exams. revealed that the rock body of Kudowa ranges from the monzonite-granitic to the tonalitic compn. Lack of thermal contacts with the surrounding mica- and hornblende schists and evidence of feldspathization prove a metasomatic origin of the rock. Penetration of the primary differentiated sediments by granitizing matter took place in deep regions at high temp. and caused an increase in vol. and consequently led to mobilization, differential movements, plastic folding, and intrusion. Jan Burcharski

45 //

5

37
Influence of calcium ions on catalytic oxidation of arsenic trioxide by air. Alfons Krauze and Maria Borkowska
(Univ. Poznań, Poland). *Bull. soc. chem. et lettres Paris*, no. B14, 281-8 (1958) (in German).—As₂O₃ was oxidized by air in 0.5*N* NaOH to which CuSO₄ (0.0107 g. Cu per 0.1176 g. As₂O₃) was added, in the presence of Ca(OH)₂. Higher concns. (*c* > 3.08 × 10⁻⁴ g. Ca per 50 ml. of the reacting mixt.) inhibited the reaction; lower ones accelerated it; below a limit of *c* = 4.74 × 10⁻⁴ there was no effect.

J. Stecki

J.S.

BORKOWSKA, M.; CHODKOWSKI, E.

Preparation of 4, 4'dichlorobiphenyl by the thermal condensation of chlorobenzene.
p. 232.

PRZEMYSŁ CHEMICZNY. Ministerstwo Przemysłu Chemicznego i Stowarzyszenie Naukowo-Techniczne Inżynierów i Techników Przemysłu Chemicznego. Warszawa, Poland, Vol. 38, No. 4, Apr. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September, 1959.
Uncl.

BORKOWSKA, M.

Notes on the lime silicate rocks from Samborowiczki in the Strzelin
granite Massif(Lower Silesia). Bul geolog PAN 9 no.1:23-28 '61.

1. Department of Geochemistry, Mineralogy and Petrography, Geological
Institute, Polish Academy of Sciences. Presented by K. Smulkowski.

(Lime) (Silicates) (Granite)

PRUSZYNSKI,J.; KASPRZAK,M.; BARCIKOWSKI,S.; WLALZINSKI, J.; HANKIEWICZ, M.;
BOBYNSKA, M.; CEBICKI,I.; TKACZEWSKI,W.

Starr-Edwards prothesis for mitral incompetence. II. The surgical
technic. Kardiol. Pol. 8 no.1:15-17 '65

1. w III Kliniki Chirurgicznej (Kierownik: prof. dr. J. Pruszyński)
i z III Kliniki Chorob Wewnętrznych Wojskowej Akademii Medycznej
w Łodzi (Kierownik: prof. dr. A. Himmel).

BORKOWSKA, Stanislawa

Experiment in defining the complex qualification appraisal of employees, to be applied in the cotton industry. Przegl wlokiem 17 no. 10:359-362 0 '63.

1. Department of Business Economics, University, Lodz.

BORKOWSKA, Zofia

Novocain block in the treatment of peri-appendicular infiltrations.
Wiadomosci lek. 7 no.7:374-379 July 54.

(ANASTHESIA, REGIONAL,
sympathetic block in peri-appendicular infiltrations)
(APPENDIX, diseases,
peri-appendicular infiltrations, ther., procaine
sympathetic block)
(PROCAINE, therapeutic use,
nerve block in peri-appendicular infiltrations)

BORKOWSKA, Zofia; BAR-PRATKOWSKA, Jadwiga

Clinical evaluation of the cervical and oxytocin test. Pol. tyg.
lek. 19 no.44:1686-1688 N 2. '64

1. Z II Kliniki Położnictwa i Chorob Kobiecych Akademii Medycznej
w Warszawie (Kierownik: prof. dr. med. I. Roszkowski).

CZECHOSLOVAKIA

KEMULA, W.; BEHR, B.; BORKOWSKA, Z.; DOJLIDC, J.

Institute of Physical Chemistry, Polish Academy of Sciences
[Instytut Chemii Fizycznej Polskiej Akademii Nauk], Warsaw,
Poland (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 12, Dec
1965, pp 4050-4059

"Adsorption of several organic compounds on the dropping mercury
electrode in the system NH_4SCN -dimethylformamide- γ -picoline."

(Dedicated to the 75th birthday of Academician J. Heyrovsky)

4

KASPEREK, Stefan; SPIOCHOWA, Maria; BORKOWSKA, Zofia; GRUDZINSKA, Barbara

Observations on cases of subacute sclerosing leukoencephalitis.
Pediat. Pol. 40 no.8:843-850 Ag '65.

1. Z Kliniki Neurologicznej Slaskiej AM w Zabrzu (Kierownik:
prof. dr. W. Chłopicki).

BORKOWSKA-GAERTIG, Danuta; HOFMAN, Halina

Fibrinous bronchitis in infants. Pediat. pol. 36 no.5:533-537 '61.

1. Z Kliniki Laryngologicznej Kierownik: doc. dr med. J.Danielewicz
i z Kliniki Niemowlęcej p.o. Kierownik: k.n.m. dr H.Hofman Instytutu
Matki i Dziecka w Warszawie Dyrektor: prof. dr med. F.Groer.
(BRONCHITIS in inf & child)

BORKOWSKA-GOERTIG, Danuta; BORECKA, Danuta; IWANOWSKA, Teresa

Laryngological, allergological and bacteriological studies on
asthmatic children (preliminary communication). Otolaryng. pol.
17 no.4:437-439 '63.

1. Z Kliniki Laryngologicznej Dziecięcej Instytutu Matki i
Dziecka w Warszawie (kierownik: lek. D. Borkowska-Goertig) i
z Polikliniki Instytutu Matki i Dziecka i z Polikliniki Szpitala
Dziecięcego (dyrektor: dr. S. Bielobrodek).

BORKOWSKA-GAERTIG, Damuta

Recent observations on the etiology of acute laryngeal infections.
Pediat. Pol. 40 no.10:1049-1054 O '65.

1. Z Kliniki Otolaryngologicznej Instytutu Matki i Dziecka w
Warszawie (Kierownik: lek. D. Borkowska-Gaertig; Dyrektor:
prof. dr. med. B. Gornicki).

POLAND/Diseases of Farm Animals - Diseases Caused by Protozoa. R-3

Abs Jour : Ref Zhur - Biol., No 10, 1958, 45442

Author : Senze, A., Samborski, Z., Borkowski, B.

Inst :

Title : A Method for the Treatment of Trichomoniasis in Bulls.

Orig Pub : Med. weteryn., 1957, 13, No 6, 335-336.

Abstract : No abstract.

Card 1/1

- 26 -

CIESZYNSKI, Tadeusz; BORKOWSKI, Boguslaw

Alkaloids from the genus Thalictrum L. Part I. Acta Pol. pharm.
22 no.2:171-179 '65.

I. Z Zakladu Farmacji Stosowanej i Zakladu Farmakognozji
AM w Poznaniu.

BORKOWSKI, B.

3472

510.318 : 542.070.2 : 546.814-33

3

Krause A., Borkowski B. Stabilisation of Solutions of Hydrogen Peroxide Using α -stannic Acid Gel.

"O stabilizacji roztworów wadliwienku wodoru przy pomocy żelu kwasu α -cynowego", Przegląd Chemiczny, No. 8, 1954, pp. 392-396, 1 fig., 8 tabs.

Results of investigation have shown that the α -Sn(OH)₄ gel is perfectly suitable for stabilising every concentration of H₂O₂ in the temperature range of 15-80°C (5 mg of SnO₂ per 1 l of H₂O₂ is sufficient for this purpose). The minimum quantity of gel which still exercises some degree of stabilizing effect is 0.05 mg/l. The influence was investigated of the pH at which α -Sn(OH)₄ gel was prepared on the stabilising properties of such gel. The decomposition of H₂O₂ was determined by gasometric and manganometric methods. Pure aqueous solutions of H₂O₂ preserved in glass vessels underwent a slow decomposition in consequence of dilution of trace quantities of glass imparting alkaline reaction to the solution. Ions OH⁻ exert an autocatalytic influence on the decomposition of hydrogen peroxide in accordance with the following reactions: H₂O₂ \rightleftharpoons H⁺ + O₂H[•]; H⁺ + OH⁻ \rightleftharpoons H₂O; 2O₂H[•] \rightarrow O₂ + 2OH⁻ etc. α -stannic acid gel, as an amphoteric acid product, stabilises hydrogen peroxide by absorbing OH⁻ ions.

Berkowski, B.

3935

546.47-36 : 541.128.36 : 548.215

Berkowski, B. Amphoteric Hydroxides of Metals as Hydrogen Peroxide Stabilisers.

"Amfoteryczne wodorotlenki metali jako stabilizatory nadilenu wodoru". Przemysł Chemiczny. No. 4, 1955, pp. 184-186, 5 tabs.

On the assumption that the OH ions (from dissolved glass or from the solvent) influence the rate of decomposition of hydrogen peroxide

In this investigation was made of the stabilising properties of amphoteric hydroxides (and oxides) of metallic elements capable of yielding these ions. The behaviour of Al, Zn, Sb, Ti, Mo, V and As hydroxides (or oxides) and of tellurous acid, was observed by measuring the volume of oxygen evolved in hydrogen peroxide decomposition at 20°C. The results obtained show that all the compounds investigated possess the property of stabilising to some degree solutions of hydrogen peroxide. Zinc hydroxide, it seems, can be of some practical value as a hydrogen peroxide stabiliser. Experiments carried out to examine the stabilisation of H₂O₂ (concentration 0.5 N and 2 N at room temperature over a period of 8 weeks) made it possible to determine the amount of hydroxide sufficient to prevent decomposition. The amount was 1 mg ZnO for 100 ml hydrogen dioxide solution for the two given concentrations.

BORKOWSKI, Boguslaw

✓ Characterization of α - and β -stannic acids on a catalytic basis. Alfons Krause and Boguslaw Borkowski (Univ. Posen, Poland). *Roczniki Chem.* 29, 307-24 (1955) (German summary). — α - and β -Stannic acids were investigated in the catalytic decompr. of H_2O_2 and in the peroxidative oxidation of indigo carmine at 37°. They were used as carriers of univalent Ag ion, bivalent Co, Cu, Ni, Mn, Zn, Hg, Pb, Ba, and Mg ions, trivalent Fe, Al, and Cr ions, $[AuCl]^{4-}$, $[Fe(CN)_6]^{4-}$, and certain combinations of these ions. A difference in activities of the acids with the various ions was observed. It was suggested that the acids might be distinguished catalytically.

P. Dreyfuss

Borkowski, R.

Distr: 4E3d

✓ Amphoteric metal hydroxides as stabilizers of hydrogen peroxide. B. Borkowski (Univ. Poznań, Poland).

Przemysł Chemiczny 34, 184-0 (1956) (English summary).—

Amphoteric hydroxides (and oxides) of metals, particularly Zn²⁺, counteract the decompr. effect of OH⁻ (from glass or from the solvent) upon H₂O₂. The decompr. of 100 ml. of 0.5N H₂O₂ with 1 mg. of Zn(OH)₂ (as ZnO) during 75 days amounted to only 7.8%; of 5N H₂O₂ during 60 days, 4.8%.

L. C. Manitius

5

1

Snow Jr.

POLAND / Chemical Technology. Chemical Products and
Their Application--Elements. Oxides.
Mineral Acids, Bases, Salts

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8811

Author : Borkowski, B., Lewandowski, A.

Inst : Not given

Title : The Content of Some Rare Earth Elements in the
Precipitate Resulting from Neutralization of
Technical Phosphoric Acid

Orig Pub: Przem. chem., 1957, 13, No 5, 281-285

Abstract: The precipitate resulting from neutralizing
 H_3PO_4 prepared from "Kol'skikh" apatite concentrate
was examined. The total content of rare earths
and the elemental composition of the precipitate

Card 1/2

POLAND / Chemical Technology. Chemical Products and
Their Application--Elements. Oxides.
Mineral Acids, Bases, Salts H-8

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8811

were determined. Ce and Th were determined gravimetrically by precipitation with benzoic acid and 8-hydroxyquinoline. Nd, Pr were determined spectrophotometrically. Curves are given for absorption of NdCl_3 , PrCl_3 solutions. La is determined chromatographically. For elution, citric acid and NH_4OH were used. Bibliography 15 references. --Author's abstract

Card 2/2

129

COUNTRY	: Poland	H-8
CATEGORY	:	
ABS. JOUR.	: RZKhim., No. 21 1959, No.	75407
AUTHOR	: <u>Borkowski, B.</u>	
INST.	: Not given	
TITLE	: The Enrichment of Low-Phosphate Raw Material in Rare Earths	
ORIG. PUB.	: Przemysl Chem, 13, No 10, 604-606 (1957)	
ABSTRACT	: The feasibility of the enrichment in rare earth elements of precipitates formed during the neutralization of one of the hydrogens in technical H_3PO_4 with ammonia and containing 0.52% rare earth elements has been investigated. 20 gms of the precipitate obtained are dissolved in dil HCl (1 : 1), the solution is brought to boiling, 20 gms of urea are added, and the solution is heated for 3 hrs over a boiling water bath. The precipitate obtained is subjected to fractional	
CARD: 1/2		
178		

BORKOWSKI, B.; PASYNKIEWICZ, J.

The influence of the naphthalene content of benzene on the amount of phenol extracted from water. p. 133.

GAZ, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne Inżynierów i Techików Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.
Vol. 33, No. 3, March 1959.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 7, July 1959

Uncl.

1087, 1043, 1155

23509
P/014/60/039/012/003/007
A221/A126

52200

AUTHORS: Borkowski, Bogusław, and Bańczykówna, Krystyna

TITLE: On lanthanum removal from the mixture of rare-earth oxides

PERIODICAL: Przemysł Chemiczny, v. 39, no. 12, 1960, 750 - 752

TEXT: The authors present the method applied by them in separating lanthanum oxide from the mixture of other lanthanide oxides. While separating rare-earth oxides and after the removal of cerium, separation of other oxides was impeded by excess quantity of La_2O_3 . In order to remove it from the mixture, the authors decided to apply the modified method by Wheelwright and Spedding (Ref. 2: E. J. Wheelwright, F. H. Spedding, J. Am. Chem. Soc., 75, 2529, 1953) in which diammonium versenate (diammonium salt of ethylenediaminetetra acetic acid) was replaced by disodium versenate. Of the group of lanthanide rare earth, the lanthanum itself forms the least durable versenate complex compound, therefore the authors thought that, if proper conditions for pH, for concentration of the solution and for right proportion of versenate will be maintained, it should be retained in the ionone column. The authors supported their reasoning by working out equilibrium equations.

Card 1/3

23509
P/014/60/039/012/003/007
A221/A126

On lanthanum removal from the mixture of...

For the experiment they used a glass tube 1.8 cm in diameter and 42 cm long with a 25 cm high column of strongly acidic kation exchanger (the product of sulphophenol and formaldehyde condensation). Lanthanide oxides were first dissolved in hydrochloric acid, dried out and dissolved in an accurately measured quantity of distilled water and a stoichiometrically weighed out quantity of versenate added; the pH value was adjusted and maintained between 3.5 and 6.5. The solution was then poured quickly through the ionone tube and washed down with distilled water. The solution running out from the tube was collected, concentrated by partial evaporation, acidulated with HCl and the lanthanides precipitated in the usual way as oxalates. Lanthanides absorbed in the column were washed with HCl and precipitated as oxalates as well. Both fractions were roasted at 900°C and La₂O₃ estimated spectrographically. From the mixture of rare earth oxides containing 43% La₂O₃, more than 80% were obtained from the fraction retained in the ion exchanger. In the solution which ran out from the ion exchanger column, only about 15% of La₂O₃ was obtained. The accurate method of lanthanum estimation will be published separately on a later date. There are 2 tables and 8 references: 1 Soviet-bloc and 7 non-Soviet-bloc. The most recent ref-

Card 2/3

On lanthanum removal from the mixture of...

²³⁵⁰⁹
P/014/60/039/012/003/007
A221/A126

erence to English-language publications reads as follows: K. Bril, S. Bril,
P. Krumholz, J. Phys. Chem., 63, 256 (1959).

ASSOCIATION: Katedra Chemii Nieorganicznej Uniwersytetu im. A. Mickiewicza
(Department of Inorganic Chemistry of the University im. A.
Mickiewicz), Poznań

SUBMITTED: September 5, 1960

X

Card 3/3

DORKOWSKI, B.

3485

C28.34.003 : 547.063.1

Borkowski B. The Removal of Phenols from Gas Works Sewage Waters.
„Odseniołowanie wód ściekowych w gazowni”. Gaz, Woda i Technika Sanitarna No. 6, 1954, pp. 169-172, 9 figs., 2 tabs.

POL.

Among the components of water from gas works, conveyed in the form of sewage into rivers or lakes, phenols — found in amounts of from 3 to 6 g/l — are particularly noxious to fish and all life using the water for drinking. Various methods for removing phenols from water are reviewed, but they have been found to be complicated and uneconomic, especially in cases in which the phenol concentration in the water is weak. A certain amount of research has already been undertaken in the Central Gas Industry Laboratory with a view to finding cheaper methods such as: 1) extraction, using oleaginous waste from the synthetic fibre industry; 2) absorption, using active carbon waste; 3) combustion, using hot burned gases from furnaces and boiler rooms. The best results in incompletely removing phenols from water have been obtained with method 2.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206420006-1

BORKOWSKI, Bogdan

Removing of phenol from gasworks waste. Bogdan
Borkowski. Gas, Water, Tech., Soil, 28, 109-72 (1959).
Reviewed with 14 references. Henry W. Lawenda

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206420006-1"

BCRKWWSKI, B.

Some possibilities of the utilization of water containing gas.

p. 274. Vol. 29, no. 8, Aug. 1955, Gaz, Woda I Technika Sanitarna.

SOURCE: East European Accessions (EEAL), LC, Vol. 5, no. 3, March 1956.

BORKOWSKI, BOGDAN

POLAND/Chemical Technology - Chemical Products and Their
Application. Treatment of solid mineral fuels

I-12

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12870

Author : Borkowski Bogdan

Title : Utilization Possibilities of Flue Gases

Orig Pub : Spaliny--zrodlo gospodarczych mozlowosci. Gaz, woda,
techn. sanit., 1955, 29, No 9, 297-299 (Polish)

Abstract : A brief review and an analysis of the possibility of a practical utilization of the components of flue gases, CO₂, SO₂, N₂, as raw materials in chemical manufacture. Mention is made of investigations, initiated in 1952, of the use of hot flue gases in the purification (dephenolization) of sewage water. A scheme is described of a process for removing SO₂ from flue gases by the ammonia method.

Card 1/1

- 225 -

BORKOWSKI, B.

Research on the separation of phenols from gasworks sewage. Biuletyn. p. 7.
(KOKS, SMOLA, GAZ. Vol. 1, no. 2, Apr./June 1957, Katowice, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.
Uncl.

BORKOWSKI, B.

Economic problems of the industrial sewage disposal in metallurgy. p. 48.

GAZ, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne
Inżynierów i Techników Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa,
Polska. Vol. 33, no. 2, Feb. 1959.

Monthly list of East European Accessions Index (EEAI), LC, Vol. 8, no. 6,
June 1959
uncla.

BORKOWSKI, Bogdan

Research in the field of purification of phenol sewage in the
gas industry. Gaz woda techn sanit 36 no.5:177-182 My '62.

1. Centralne Laboratorium Gazownictwa, Warszawa.

BORKOWSKI, Bogdan; NACZYNSKI, Jerzy

Balance problems in thermal and catalytic sewage processing.
Zes. Nauk. Inst. Sanit. 38 no. 5:148-151 May 1964

I. Central Gas Engineering Laboratory, Warsaw.

ACCESSION NR: AP4015235

P/0014/64/043/001/0016/0019

AUTHOR: Borkowski, Boguslaw; Borkowska, Aleksandra; Banzykowna, Krystyna

TITLE: Rapid method of preparing cerium of very high purity

SOURCE: Przemysl chemiczny, v. 43, no. 1, 1964, 16-19

TOPIC TAGS: cerium oxide, ammonium hexanitrocerate, cerium complex compound

ABSTRACT: The starting material used in developing the method was $(\text{NH}_4)_2\text{Ce}(\text{NO}_3)_6$ obtained from technical-grade cerium hydroxide. The salt was dissolved in water, and after a certain time had elapsed, the solution was passed through a column containing a cation exchanger. It was noted that a substantial part of the cerium had gone through the column without being retained, while the cations constituting the impurities of the ammonium hexanitrocerate used had been completely removed from the solution. It was also observed that in order to obtain a high yield of pure cerium dioxide, a 12-15 hr interval was necessary between the dissolution of the salt and its passage through the column. The effect of the period of "aging" of the solution, its concentration, and the presence of other impurities (such as NH_4NO_3 or HNO_3) on the efficiency of the method was studied. Under optimum conditions, this yield may reach 90% of theoretical. The presence of foreign ions could not be

Card 1/2

ACCESSION NR: AP4015235

detected by common methods of spectroscopic analysis. The mechanism of the process may be interpreted by attributing the phenomena observed to the formation of noncationic hydroxynitrate complexes of cerium.

ASSOCIATION: Zaklad Ziem Rzadkich UAM, Poznan (Rare Earths Laboratory UAM)

SUBMITTED: 01Jun63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH

NO REF SOV: 000

OTHER: 014

Card 2/2

BORKOWSKI, Roman; KAZUBEK, Piotr.

Conization with Spencer's apparatus. Ginek. Pol. 35 no.4:
575-580 Jl-Ag '64

1. Z Oddzialu Ginekologicznego Centralnego Szpitala Kolejowego
w Warszawie Miedzylesiu (Ordynator: dr. med. R. Borkowski).

BORKOWSKI, B.: KAMINSKI, A.: KAMINSKA, D.

Biological evaluation of effect of tannins. Acta Poloniae pharm.
12 no.3:135-145 '53.

1. Z Zakladu Farmakognozji A.M.W Poznaniu Kierownik: doc. dr B.
Borkowski. Z Zakladu Farmakologii A.M. W. Poznaniu Kierownik:
prof. dr J. Dadlez.

(TANNIN,
standard, on Enchytraeus albus)

(INVERTEBRATES,
Enchytraeus albus, standard. of tannin on)

Volumetric determination of camphor in pharmaceutical preparations. Boguslaw Borkowski (Akad. Med., Warsaw). *Acta Polon. Pharm.* 3, 125-134 (1954) (English summary).

From 1 to 3 g. of camphor oil (I), 200 cc. H₂O, and 0.2 ml. xylene are steam distd. for 30 min. in Deryng's app. (*Acta Polon. Pharm.* 3, 121(1951)), followed by 15-min. steam distn. of 0.3 ml. xylene added to the same flask as I. The amt. of camphor (II) in the graduated flask-receiver is measured and correction for xylene applied. II can also be detd. in camphor ointment and in camphor spirit by this method; in the latter II is first sepd. by treating the spirit with 20 ml. satd. NaCl and filtering; the wet solid and paper are used.

I. Z. Roberts

BORKOWSKI, B.; STYRYLSKA, D.

Content of oil in melissa leaves during various seasons. Acta
Poloniae pharm. 11 no.2:153-158 1954.

1. Z Zakladu Farmakognosji Akademii Medycznej w Warszawie.
Kierownik: prof. dr J.Deryng.

(PLANTS,

*Melissa officinalis, content of oil in various seasons)

(OILS,

*in Melissa officinalis, seasonal factor)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206420006-1

B. BORKOWSKI, D.

B. BORKOWSKI, A. KAMINSKI, D. KAMINSKA: Biological criterium for the effectiveness of tannine drugs.

SO: Acta Polonica Pharmaceutica (Pharmaceuticals), Third quarter 1985.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206420006-1"

BORKOWSKI, B. Doc.dr.

Substitution of Matricaria chamomilla with Matricaria discoidea.
Farmal.polska 11 no.6:136-137 June '55.

(PLANTS,

Matricaria chamomilla & Matricaria discoidea, comparative evaluation of ther.properties)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206420006-1

BORKOWSKI, B.

BORKOWSKI, B.; KOZLOWSKI, J.

Formation of cork and phellogen in Viburnum opulus L. Acta Polonae
pharm. 12 no.1:13-16 1955.

l. Z Ogrodu Farmakognostycznego A.M. w Poznaniu. Kierownik: doc. dr
B.Borkowski.

(PLANTS,

Viburnum opulus, cork & phellogen form.)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206420006-1"

BORKOWSKI, R.

BORKOWSKI, B.; REZLER, H.

Oil in Salva officinalis leaves during annual vegetation. Acta
Poloniae pharm. 12 no.1:39-48 1955.

1. Z Zakladu Farmakognozji A.M. w Warszawie. Kierownik: prof. dr
Jakub Deryng.

(PLANTS,

Salva officinalis, oil content, annual variations)

(OIL,

Salva officinalis oil, annual variation in leaves)

BORKOWSKI, Boguslaw, Doc., Dr.; DADLEZ, Jozef, Prof., Dr.; WROCINSKI, Tadeusz

Toxicity of antibiotics in Enchytraeus albidus; action in vitro
according to chemical structure of antibiotics. Bull. Soc. amis
sc. Poznan, ser. C No.6:39-43 1956.

1. Inst. de Pharmacognosie et de Pharmacologie de l'Academie de
Med. a Poznan.

(ANTIBIOTICS, toxicity,
in Enchytraeus albidus, role of chem. structure (Fr))

✓ Seasonal variation of the content of volatile oil in the leaves of *Mentha piperita*. Boguslaw Borkowski and Halina Suchocka (Dept. Pharmacog. Inst. Acad. Warsaw). *Dissertations Pharm.* 8, 181-90 (1958).—The amt. of volatile oil depends not only on time of collection but also on the position of the leaves. Top leaves yield more than bottom leaves. In 3-year-old specimens max. yield, up to 5.48%, was obtained at the time of the opening of the flower buds. This yield was obtained from the uppermost leaves. During the flowering period the yield of similarly located leaves went down to 4.50%. In biennials the top leaves of plants in the period just preceding flowering yielded 4.07-5.8% of peppermint oil. There was a const. decrease of output in leaves harvested later in the season, down to 2.10% in leaves harvested in October. In lower leaves of the 3-year-old specimens the max. was observed during the flowering phase proper. It varied from 0.87 to 2.90%. In biennials the yield of the lower leaves went down owing to inclusion of lateral stems to between 1.89 and 3.10%. A. H. K.

2

POLAND/Cultivated Plants - Medicinal. Essential Oil-Bearing.
Toxins.

M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53885

Author : Borkowski, B., Kowalska, M., Kozlowski, J.

Inst :

Title : The Biological Activity of Raw Rhiz. Valerianae and Its
Oil Content in the Second Year of the Plant's Life.

Orig Pub : Farmac. polska, 1956, 12, № 8, 197-202

Abstract : During the year the oil content fluctuated from 0.5 to
1.5%. The biological activity, determined by Kaminskiy's
method on tench fry, proved to be highest during the
period of intensive growth of the plants in May, and also
during the period of blossoming in the field. The oil
content of the root increases with lower temperature.
Parallelism between the biological activity of the ex-
tract and the oil content in the root was observed. --
Z.I. Zhurbitskiy

Card 1/1

- 160 -

BORKOWSKI, B.

2
Influence of calcium content upon viscosity of gum arabic
solutions. B. Borkowski and M. Olszak. *Acta Polon.
Pharm.*, 13, 53-6 (1950) (English summary).—There is no
interdependence between the Ca content and the viscosity
of gum solns. Ca detd. by means of the complexon ranged
from 0.6345 to 0.0511%. P. Dreyfuss
2

BORKOWSKI, BOGUSLAW

Oil content in *Thymus vulgaris* during its yearly vegetative period. Boguslaw Borkowski and Irena Gawron (Zakl. Farm., Warsaw). *Acta Pharm. Pharm.* 13, 101-72 (1950) (English summary). — *T. vulgaris* was cut after blooming in weekly intervals; 5 groups of plants were obtained each with a different period of blooming of the new shoots. Each group was then tested for oil content. In the 3 last blooming series the max. oil content coincided with the period of blooming while in the 2 first series it coincided with the budding period. The oil content from the consecutive blooming herbs was 1.5, 1.5, 2.4, 2.6, and 2.1%, resp. The oil content of 49 samples collected at various stages of growth of the plants ranged from 0.5 to 2.0%. Plants collected in July and August showed the highest oil content. A comparison of results obtained in each of the 5 groups indicates that the oil content in the herb depends primarily on the stage of the development of the plant. Environmental

factors, such as atm. conditions, play a secondary role.
Richard Ehrlich

BORKOWSKI, BOGUSLAW

POLAND/Medicinal Substances, Vitamins, Antibiotics.

H.

Abs Jour : Ref Zhur - Khimiya, No 19, 1958, 65355

Author : Borkowski Boguslaw, Kaminski Alfred, Moderski, F.

Inst :

Title : Content of Tanning Materials and the Tanning Action of the Rhizome Polygonum Bistorta Linne in the Period of Growth and the Influence of the Temperature of Drying.

Orig Pub : Acta polon. pharmac., 1956, 13, No 6, 467-475.

Abstract : The content of tanning materials was studied by the Polish method of pharmacopedia III, and the tanning action (TA) of the rhizome Polygonum bistortum Linne in the course of an annual vegetation period was studied by the biological method of Kaminskiy. Samples were dried at 20-50°. The greatest content of tanning materials was found in the spring; the least, in the period of the ripening of the seeds; it increases somewhat in the autumn, during which drying at 50° somewhat increases

Card 1/2

9

POLAND/Medicinal Substances, Vitamins, Antibiotics.

H.

Abs Jour : Ref Zhur - Khimiya, No 19, 1958, 65355

the content of tanning materials. TA of extracts is not found in simple dependence on the content of tanning materials but, in a period of ripening, this dependence is preserved during the conditions of drying at 20°. In the period of the ripening of the seeds, TA increases sharply, but gradually fluctuates and drops during drying at 50°. It is recommended that the raw material be gathered in the period preceding flowering and dried under normal conditions, not raising the temperature.

Card 2/2

POLAND/Cultivated Plants - Medicinal. Essential Oils. Toxins.

M-8

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30121

Author : Borkowski, B., Chochlew, L.

Inst : Institute for Plant Cultivation.

Title : The Effect of Temperature and Moisture on the Formation
of Essential Oil in the Leaves of Peppermint (*Mentha*
piperita L.)

Orig Pub : Biul. Inst. rosl. leczn., 1957, 3, No 2, 123-131.
(Polish; res. Russ., Ger.)

Abstract : Two years of research on the cultivation of peppermint were
made under the various temperature, humidity and soil con-
ditions in both hothouse and on open fields. It was es-
tablished that dry air and high temperature significantly
facilitate increased essential oil content in the plant
leaves.

Card 1/1

COUNTRY	:	Poland	V
CATEGORY	:	Pharmacology and Toxicology. Medicinal Plants	
AKS. JOUR.	:	RZhBiol., No. 1 1959, No. 4614	
AUTHOR	:	<u>Borkowski, B.</u> ; Gertig, H.; Wrociński, T.	
INST.	:	Institute of Medicinal Plants	
TITLE	:	Comparative Study of the Spasmolytic Action of the Extracts of <i>Tussilago farfara</i> L. and <i>Petasites officinalis</i> Moench.	
ORIG. PUB.	:	Biul. Inst. rosl. leczn., 1957, 3, No. 3, 195-201	
ABSTRACT	:	No abstract	
CARD:	1/1		

COUNTRY : Poland
CATEGORY : Pharmacology and Toxicology. Medicinal Plants V
ABS. JOUR. : RZhBiol., No. 1 1959, No. 4615
AUTHOR : Borkowski, B.; Skrzypczakowa, I.
INST. :
TITLE : Comparative Study of Native Gentians

ORIG. PUB. : Acta polon. pharmac., 1957, 15, No.6, 425-430
ABSTRACT : No abstract

CARD: 1/1

34

BORKOWSKI, BOGUSLAW

POLAND / Chemical Technology, Chemical Products and Their Application, Part 3. - Drugs, Vitamins, Antibiotics. H-17

Abs Jour : Ref Zhur ~ Khim., No 14, 1958, No 47765

Author : Boguslaw Borkowski, Zdislaw Kowalewski, Bozena Pasichowa.

Inst : Institute of Medicinal Plants.

Title : Capsaicine Preparation of Red Pepper (*Capsicum annuum L.*)

Orig Pub : Biul. Inst. rosl. leczn., 1957, 3, No 3, 216 - 221.

Abstract : A simple separation method of raw capsaicin (I) from red pepper (*Capsicum annuum L.*) fruit was developed. The extraction of I is carried out in the duration of 30 hours in a continuous percolator with the pentane fraction prepared by the distillation of petroleum ether at < 40°. The extract is evaporated to 2/3 of the original volume and freezed out at -5°. The fallen out precipitate of raw I is washed and saponified with alkaline alcohol solution; the solution acidified with HCl is disclosed with activated

Card 1/2

FOLAND / Chemical Technology, Chemical Products and Their Application, Part 3. - Drugs, Vitamins, Antibiotics.

H-17

Abs Jour : Ref Zhur - Khim., № 14, 1958, No 47765

carbon and kieselguhr, after which it is recrystallized 5 times from petroleum ether. The melting point of the prepared chemically pure I is 63°, the yield is 41.4% (of the I content in fruit). The proposed method completely solves the question of preparation of I for the pharmaceutical industry.

Card 2/2

2

BORKOWSKI, B.

POLAND/Chemical Technology. Chemical Products and Their
Application, Part 3. - Food Industry.

H

Abs Jour: Referat. Zhurnal Khimiya, No 21, 1958, 72274.

Author : Boguslaw Borkowski, Henryk Gertig, Marian Olszak.

Inst :

Title : Capsaicin and Ascorbic Acid Contents in Red Pepper
(Capsicum annuum L.) Fruit at Various Stages of
Ripening.

Orig Pub: Acta polon. pharmac., 1957, 15, No 4, 283-288.

Abstract: No abstract.

Card : 1/1

POLAND/Chemical Technology. Chemical Products and H
Their Uses. Part III. Food Industry.

Abs Jour : Ref Zhur-Khimiya, No 15, 1958, 51975

Author : Borkowski, Boguslaw; Gortig, Henryk;
Olczak, Marian

Inst Title : Effect of Drying Temperature on Capsaicin
and Ascorbic Acid Content of Red Pepper
Fruit.

Orig Pub : Acta polon. pharmac., 1957, 15, No 4,
289-292

Abstract : Prior to the determination of capsaicin
and ascorbic acid, red pepper fruits were
dried in various conditions at 80, 70,
60, 50, 40, and 30° in driers, in the sun,

Card : 1/2

POLAND/Chemical Technology. Chemical Products and H
Their Uses. Part III. Food Industry.

Abstr Jour : Ref Zhur-Khimiya, No 15, 1958, 51975

and in darkened and slightly lit chambers.
It was determined that the fruits may be best dried without the access of light.
Maximum amount of capsaicin was found in the fruits dried in natural conditions, in dimly lit chambers. The maximum amount of ascorbic acid was found in fruits dried in a drier at 30°. -- Z. Fabinskiy

Card : 2/2

117

POLAND/Chemical Technology - Chemical Products and Their Application. Synthetic and Natural Medicinal Substances. Galelicals and Medicinal Forms. H.

Abs Jour : Ref Zhur - Khimiya, No 10, 1959, 36020

Author : Borkowski, B., Lutomski, J.

Inst : Institute of Medicinal Plants.

Title : Substances Conditioning the Sedative Action of Medicinal Valerian. Part I. The Comparative Study of Different Preparations Obtained from Specific Raw Materials. Part II. The Biological Activity of Ethereal Oils, Alkaloids and Pirro methyl Ketones.

Orig Pub : Biul. Inst. rosl. leczn., 1958, 4, No 2, 115-125; 126-132.

Abstract : There were investigated, by the biological evaluation method, 20 preparations, obtained by means of extraction

Card 1/2

H-96

COUNTRY	:	Poland	H-17
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 1959, No. 87580	
AUTHOR	:	Borkowski, B.; Kowalewski, Z.; Lutoski, J.	
INST.	:	Institute of Medicinal Plants	
TITLE	:	Preparation of Colchicine from Autumn Crocus (Colchicum autumnale L.) and Evaluation of Quality of the Raw Material.	
ORIG. PUB.	:	Biul. Inst. rosl. leczn., 1958, 4, No 3, 177-185	
ABSTRACT	:	To isolate colchicine (I) from the above-stated raw material use was made, in addition to the method described in the literature, 2 methods evolved by the authors in which the extractant was ethyl acetate (yield of I 0.21% MP 135°) and benzene (yield of I 0.33%, MP 135°). In both methods I was free from extraneous admixtures (studied by paper chromatography). As a result of biological tests the conclusion is reached that the I obtained by the benzene method is not inferior to I of the firm Merck, and yield of I is higher than on isolation of I (for comparison) by the two procedures described in the literature. I-content in raw material is determined by the quantitative colorimetric method (solvent -- benzene). From authors' summary.	
CARD:			

212

COUNTRY	: Poland	E-3
CATEGORY	:	
ABS. JOUR.	: RZKhim., No. 1 21 1959, No.	74704
AUTHOR	: Borkowski, B. and Czyszewska, S.	
INST.	: Institute of Plant Medicines	
TITLE	: The Photometric Determination of Flavonoids. Comparative Evaluation of Various Procedures on the Basis of the Results Obtained for Rutin and *	
ORIG. PUB.	: Biull Inst Rosl Leczn, 4, No 4, 340-357 (1958)	
ABSTRACT	: Seven methods for the determination of flavonoids are compared on the basis of the results obtained for rutin (I) and robinin (II). The low-sensitivity cyanide method (J. Valentine and J. Wagner, Pharm Zentralhalle, 91, 292 (1952)) is simple and suited for the determination of flavones, flavonols, and flavonones, but not for the determination of isoflavones and chalkones. The method based on the reaction of I with diazotized sulfanilic acid (III) is 100 times more sensitive.	

CARD: 1/5 * Robinin

90

COUNTRY :	Poland	E-3
CATEGORY :		
ABS. JOUR. :	RZKhim., No. 21 1959, No.	74704
AUTHOR :		
IMB# :		
TITLE :		
ORIG. PUB. :		
ABSTRACT :	0.25 gm of dried and ground raw material is extracted for 90 min in a Soxhlet apparatus with a mixture of methanol and pyridine (20 : 1). The volume of the extract is made up to 25 ml and 100 microliters of the resulting solution are deposited on Whatmann No 4 paper with increasing amounts (1-5 μ) of quercetin (IV) and chromatographed for 2-3 hrs with 60% CH ₃ COOH by the descending method. The IV is determined by comparing the fluorescence with standards under UV	
CARD:	2/5	

COUNTRY	:	Poland	E-3
CATEGORY	:		
AES. JOUR.	:	RZKhim., No. 21 1959, No.	74704
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	light. The I spot is rinsed with 5 ml of 0.5% NH ₃ solution, 1 ml of a solution of III is added to the solution obtained, 2 ml of 1 N hydrochloric acid are added after 5 min, and the resulting solution is analyzed photometrically after 15 min with a S ₄₂ filter. The Beer law holds up to 0.08 mg I and 0.06 mg II. The method of Davidek and Fragner (RZhKhim, 1958, No 16, 52574) is less sensitive but more accurate than the procedures described above. The method of Konstantin-	
CARD:	3/5		

COUNTRY	:	Poland	E-5
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 21 1959, No.	74704
AUTHOR	:		
TEST	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	esko and Oteleanu (RZhKhim, 1957, No 22, 1997) is more complex but permits the simultaneous determination of I and IV. The method of Khagendorn and Ney [Hagendorn and Ney?] using ZrOCl ₂ (RZhKhim 1955, No 18, 40488) is sensitive and simple but requires a large number of reagents. A second method proposed by the same authors and using AlCl ₃ is likewise sensitive but the calibration curve is linear over a very small range of concentrations. A new sensitive method has been	
CARD:	4/5		

COUNTRY	:	Poland	E-2
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 1 21 1959, No.	74704
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	developed: 0.1 gm of Zn dust are treated with 10 ml of a methanolic solution of I or II, followed by 2.0 ml of 22.5% HCl, the mixture is cooled for 1 min with water and 0.5 ml of 0.5% NaNO ₂ is added (I forms a red and II an orange complex); the solution is analyzed photometrically after 20 min, using a S ₅ filter. The [Beer?] law is observed for concentrations of 0.1-0.6 mg I or II.	
		N. Turkevich	
CARD:	5/5		

BORKOWSKI, B.

"Substances contained in, and the methods of testing of medicinal plants used in homœopathy," by H. Schindler. Reviewed by Borkowski.
Inst przem ziel biul 7 no. 4:307 D'61.

BORKOWSKI, Boguslaw, prof. dr.

Problematics concerning medicinal plants in perspective
planning. Farmacja Pol 16 no.17:357-359. S '61.

BORKOWSKI, Boguslaw; PASICH, Boleslaw

The pharmacological and biological importance of triterpenoids.
Farmacja Pol 18 no.3:49-54 Mr '62.

1. Katedra Farmakognzji, Poznan.

BORKOWSKI, Boguslaw

Importance of triterpenes in pharmaceutical preparation. Farmacja
Polska 18 no.10:237-241 Maj '62.

POLAND

BORKOWSKI, Boguslaw and FRENCLOWA, Irena, Chair of Pharmacognosy (Katedra Farmakognozji), AM [Akademia Medyczna, Medical Academy] in Poznan (Director: Prof. Dr. B. BORKOWSKI)

"Chromatographic Analysis and Preparation of Harminic Alkaloids from Plants."

Warsaw, Farmacja Polska, Vol 19, No 6, 25 Mar 63, pp 106-109.

Abstract: Authors review the literature and tabulate the 13 identified natural harminic alkaloids and their sources, as well as the chromatography conditions used in their isolation and identification by the various authors. Included are previous findings of the author (Brokowski) and co-workers on these alkaloids in three plants of the Zygophylaceae family (Peganum, Zygophyllum, and Tribulus) now extended to the fourth (Guajacum officinale L.). Of the 23 references, about 5 each are Polish, Western, and Russian, and the others in German.

1/1

BORKOWSKI, Boguslaw; SKRZYPczAKOWA, Lutoslawa

Polyphenolic compounds in herbs of the species Solidago L. Acta pol. pharm. 19 no.6:491-495 '62.

1. Z Zakladu Farmakognozji Akademii Medycznej w Poznaniu Kierownik:
prof. dr B. Borkowski.

(HERBS) (RUTIN) (BIOFLAVONOIDS) (CHLOROGENIC ACID)
(GLYCOSIDES)

BORKOWSKI, Boguslaw; JESKE, Jozef; LASTOWSKI, Zbigniew; PRZEGALINSKI,
Edmund

Spermatocidal activity of tannin and of saponins. Acta pol.
pharm. 20 no.1:91-92 '63.
(TANNINS) (SAPONINS) (SPERMATOZOA)

BORKOWSKI, Boguslaw; PASICH, Bozena

Thin layer chromatography of triterpenoids. Farmacja Pol 19
no. 21/22:435-437 25 N '63.

I. Institute of Pharmacognosy, School of Medicine, Poznan.

BORKOWSKI, Euguslaw, prof. dr

Development of scientific pharmaceutical centers during the
20-year period of the Polish People's Republic. Farmacja Pol
20 no. 13/14:484-504 Jl '64.

BORKOWSKI, Boguslaw

Achievements of Polish pharmacy in the past 20 years. Acta Pol.
pharm. 21 no.4:313-315 '64.

1. Członek Prezydium Rady Naukowej przy Ministrze Zdrowia i
Opieki Społecznej.

CIESZYNSKI, Tadeusz; BORKOWSKI, Boguslaw

Alkaloids of the genus Thalictrum L. Pt.2. Acta Pol. pharm.
22 no.3:265-269 '65.

l. Z Zakladu Farmacji Stosowanej Akademii Medycznej w Poznaniu
(Kierownik: doc. dr. R. Adamski) i z Zakladu Farmakognozji
Akademii Medycznej w Poznaniu (Kierownik: prof. dr. B. Borkowski).